

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

DRAFT

Title V, Operating

Permit: V-07-030

Closet Factory

Simpsonville, KY 40067

July 16, 2007

Rick Shewekah, Reviewer

SOURCE ID: 21-211-00046

SOURCE A.I.: 54821

ACTIVITY ID: APE20070002

SOURCE DESCRIPTION:

Closet Factory has been in operation since 2004. The facility consists of woodworking operations (EP02) and spray coating of flat wood panels (EP01) to be installed in homes as custom closets. Pollutant emissions from these activities include volatile organic compounds (VOC), organic hazardous air pollutants (HAPs) from the coating operations, and particulate matter (PM/PM₁₀) from woodworking and overspray during surface coating.

An application for a Conditional Major (CM) operating permit, under 401 KAR 52:030, *Federally-enforceable Permits for Nonmajor Sources*, was received on October 28, 2004. A second application was received on April 16, 2007 requesting a Registration be issued to the source, under 401 KAR 52:070, *Registration of Designated Sources*, instead of a CM permit. The potential to emit of volatile organic compounds (VOC) is greater than one-hundred (100) tons per year; and the potential to emit of single and combined hazardous air pollutants (HAPs) is greater than ten (10) and twenty-five (25) tons per year, respectively. As such, this permit is not issued as a Registration, or a Conditional Major, but as an initial Title V permit pursuant to 401 KAR 52:020, *Title V permits*.

COMMENTS:

Type of control and efficiency:

A closed system with Duo Pad filters and an efficiency of 95% is used to control PM emissions from EP01. Particulate matter emissions from woodworking operations are controlled by a dust collector model MRT-7A located inside a building. Control efficiency comes from building enclosure rated at 50% and the dust collector rated at 98%.

Emission factors and their source:

Emission factors for EP01 were obtained through MSDS and material balance. Emission factors for the woodworking operation, EP02, were obtained by use of manufacturer's specifications.

Applicable regulations:

401 KAR 59:010, *New Process Operations*, applies to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

401 KAR 63:002, which incorporates by reference 40 CFR 63, Subpart JJ, *National Emission Standards for Wood Furniture Manufacturing Operations*, applies to sources engaged in the manufacture of wood furniture or wood furniture products and located at a major HAP emitting source, as defined at 40 CFR 63.2. Pursuant to 40 CFR 63.800(b)(3), the permittee for this wood furniture manufacturing source has requested voluntary pollutant emission limitations of 5 tons per year (tpy) for a single HAP, and 12.5 tpy for combined HAPs to be an area source for purposes of Subpart JJ. Such restrictions shall not make this an *affected source*, as defined at 40 CFR 63.801, and shall preclude the applicability of provisions other than the requirement to demonstrating that the source meets the limits and requirements of 40 CFR 63.800 (b)(3).

Non-applicable regulations:

401 KAR 59:214, *New Factory Surface Coating Operations of Flat Wood Paneling*, does not apply to the paint booth because the source is not located in a county or portion of a county which is designated ozone nonattainment, for any nonattainment classification except marginal, under 401 KAR 51:010, nor is the source a major VOC emitting source (see Emission and Operating Caps Description).

401 KAR 50:012, Section 1, *General Application of Administrative Regulations and Standards*. Pursuant to 401 KAR 50:012, Section 1(2), in the absence of a standard specified in these administrative regulations, all major air contaminant sources shall as a minimum apply control procedures that are reasonable, available, and practical. This rule does not apply to this source because it is not a major source of air contaminants (see Emission and Operating Caps Description).

EMISSION AND OPERATING CAPS DESCRIPTION:

- a. In accordance with 40 CFR 63.800(b), to qualify this source as an area source of HAP emissions for the purposes of 40 CFR 63, Subpart JJ and preclude any other provisions of 40 CFR 63, Subpart JJ, *National Emission Standards for Wood Furniture Manufacturing Operations*, the permittee shall comply with 40 CFR 63.800(b)(3) and restrict the total annual source-wide emissions as follows:
 1. Emissions of any single hazardous air pollutants (HAP) shall not exceed 5 tons per twelve (12) consecutive month basis;
 2. Emissions of combined hazardous air pollutant (HAPs) shall not exceed 12.5 tons per twelve (12) consecutive month basis; and
 3. At least ninety (90) percent of the plantwide emissions per twelve (12) consecutive month basis are associated with the manufacture of wood furniture or wood furniture components.
- b. To preclude the applicability of 401 KAR 50:012, *General Application of Administrative Regulations and Standards*, and 401 KAR 59:214, *New Factory Surface Coating Operations of Flat Wood Paneling*, the total annual source-wide emissions of volatile organic compounds (VOC) shall not exceed 90 tons per twelve (12) consecutive month basis.

PERIODIC MONITORING:

- a. The permittee shall monitor monthly raw material usages as specified in the permit to demonstrate compliance with the source-wide emission and operating cap limitations.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the roof top vents at least once per operating week and maintain a log of the observations. If visible emissions from the vents are seen, (not including condensed water vapor within the plume), then an inspection of paint booth filters shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the paint booth shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the vents during operation. In lieu of shutting the paint booth down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the paint booth may continue to operate.
- c. Particulate filters shall be monitored once per shift (each 8 hours operation) and changed as recommended by the manufacturer.
- d. Compliance with the opacity standard shall be determined by the permittee performing a qualitative visual observation of the opacity of emissions at the dust collector vent no less than weekly and maintaining a log of the observations. If visible emissions from the vent are seen (not including condensed water in the plume), then an inspection of dust collector shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the woodworking operations shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the dust collector vent during operation. In lieu of shutting the woodworking operations down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the woodworking operations may continue to operate.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.